




UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/827,127	04/05/2001	Chaojun Deng	43774/209425	4908
826	7590	12/16/2004	EXAMINER	
ALSTON & BIRD LLP BANK OF AMERICA PLAZA 101 SOUTH TRYON STREET, SUITE 4000 CHARLOTTE, NC 28280-4000			MURPHY, RHONDA L	
			ART UNIT	PAPER NUMBER
			2667	

DATE MAILED: 12/16/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/827,127	Applicant(s) DENG, CHAOJUN	
	Examiner Rhonda Murphy	Art Unit 2667	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 20-42 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 20-42 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 20-24 and 31-36 are rejected under 35 U.S.C. 102(e) as being anticipated by Lorenz et al. (US 6,310,882).

Regarding claims 20 and 31, Lorenz teaches providing a first framework (Fig. 1 and Fig. 2, element **10**) that includes at least one circuit card (Fig. 1, **slot 14**, Fig. 2 element **140** and Fig. 3) and at least one interface transfer card (Fig. 3, element **19**) in communication with one another; providing a second framework (Fig. 2, element **10'**) that includes at least one switched network card (Fig. 1, **slot 14**, Fig. 2 element **140**; note: col. 3, lines 59-60) and at least one interface card (Fig. 3, element **19**) in communication with one another, and providing a data communication link connecting the interface transfer card of the first framework with the interface card of the second

framework to thereby establish communication between the circuit card and the switched network card (Fig. 2, link **40**).

Regarding claims 21 and 33, Lorenz teaches providing a first framework further including a backplane (Fig. 2, backplane **5**) for interconnecting at least one circuit card and at least one interface transfer card (col. 3, lines 44-48), and providing a second framework further including a backplane (Fig. 2, backplane **5'**) for interconnecting at least one switched network card and the at least one interface card (col. 3, lines 49-50).

Regarding claims 22 and 34, Lorenz teaches a plurality of first frameworks each having at least one circuit card and at least one interface transfer card (Fig. 2 and Fig. 3), and providing data communication links connecting the interface transfer cards of the first frameworks to at least one interface card of the second framework (Fig. 2, link **40**) to establish communication between the circuit cards of the plurality of first frameworks and at least one switched network card of the second framework (col. 3, lines 52-54, 59-62).

Regarding claims 23 and 35, Lorenz teaches a second framework that includes a plurality of slots for positioning switched network cards and associated interface cards such that additional switched network cards and interface cards can be added to the second framework to connect with the circuit cards and interface transfer cards of the plurality of first frameworks (Fig. 1, element **10** consisting of **slots 14** and **16**; col. 3, lines 39-48).

Regarding claims 24 and 36, Lorenz teaches providing an optical fiber connecting the interface transfer card of the first framework with the interface card of the second framework (Fig. 2, link 40; col. 3, lines 52-58).

Regarding claim 32, Lorenz teaches a first framework that includes a plurality of slots for positioning circuit cards and associated interface transfer card, wherein the slots are interconnected to form connections there between (Fig. 1, element 10 consisting of slots 14 and 16; col. 3, lines 39-48), and a second framework that includes a plurality of slots for positioning switched network cards and associated interface card, wherein the slots are interconnected to form connections there between (Fig. 1, element 10 consisting of slots 14 and 16; col. 3, lines 39-48).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claim 25-27, and 37-39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lorenz in view of Do et al. (US 6,052,276).

Regarding claims 25-27 and 37-39, Lorenz teaches providing a card having connections to a switched network card and circuit card via a backplane.

Lorenz fails to explicitly teach a passive base card and miniaturized interface cards.

However, Do teaches a passive base card having one connection to a network/circuit card via the back plane (Fig. 3; col. 5, lines 9-12) and second connectors for connection to a plurality of miniaturized interface/transfer cards (col. 5, lines 13-27; it is known in the art that interface cards are designed in a various sizes), such that each of the miniaturized interface/transfer cards are connected to the network/circuit card via the passive base card (the passive base card provides connection to the network/circuit card and also connects the interface/transfer cards via the same backplane, therefore, connecting the interface/transfer cards and network/circuit card) and each of the interface cards can be inserted and removed independently of one another (it is known in the art that the plug-in cards/interface cards are inserted and removed separately).

6. Claims 28-30 and 40-42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lorenz et al. (US 6,310,882).

Regarding claims 28 and 40, Lorenz teaches switched network cards, however Lorenz fails to teach a back up switched network card as a replacement in the event the switched network card malfunctions.

It would have been obvious to one having ordinary skill in the art at the time the invention was made, to include a back-up card in order to provide redundancy and reliability, thus avoiding system interruption or failure.

Regarding claims 29 and 41, Lorenz teaches circuit cards, however, Lorenz fails to teach a back-up circuit card as a replacement in the event the circuit card malfunctions.

It would have been obvious to one having ordinary skill in the art at the time the invention was made, to include a back-up card in order to provide redundancy and reliability, thus avoiding system interruption or failure.

Regarding claims 30 and 42, Lorenz teaches first and second frameworks having interface transfer cards and interface cards.

However, Lorenz fails to explicitly teach the cards using the same interface standard and wherein multiple pairs of interface transfer cards and interface cards use the same speed.

It is obvious and known in the art that the same standard and speed is used in order for the cards to communicate with one another.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

*Prince et al. (US Patent 5,734,656) discloses a method and apparatus for dynamically allocating bandwidth on a TDM bus.

*Horton (US Patent 6,128,300) discloses a line card with a modem interface.

*Donahue et al. (US Pub 2002/0118638) discloses a high bandwidth broadcast system having localized multicast access to broadcast content.

*Wegleitner et al. (US Patent 6,480,487) discloses a digital loop carrier remote terminal having integrated subscriber plug-in line cards for multiplexing of telephone and broadband signals.

*Spisak et al. (US Patent 6,640,273) discloses an apparatus for data bus expansion between two instrument chassis.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rhonda Murphy whose telephone number is (571) 272-3185. The examiner can normally be reached on Monday - Friday 8:00 - 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ricky Ngo can be reached on (571) 272-3139. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

rlm


RICKY NGO
PRIMARY EXAMINER